**IN THE CLAIMS:**

Please **AMEND** claims 1 and 15, as follows:

1. (CURRENTLY AMENDED) An apparatus for reproducing a DVD-Audio disk having an audio manager (AMG) having information on an audio title (ATS) and the ATS has audio title set information (ATSI) followed by ~~contiguous~~ audio objects (AOBs), the ATSI includes audio stream attributes, each audio stream attribute indicating an audio coding mode, a first, second, and third quantization bit number corresponding to the data to be reproduced, indicating and differentiating between ~~a~~ first, second, third, fourth, fifth, ~~or~~and sixth sampling frequencies~~y~~ corresponding to the data to be reproduced, and decoding algorithm information relating to a number of audio channels of the data to be reproduced, and each of the AOBs includes a plurality of audio packs recorded with audio data corresponding to the decoding algorithm stored in the audio stream attribute, the apparatus comprising:

an optical pickup to pickup an optical signal from the DVD-Audio disk;

a controller to generate, using information data extracted from the optical signal, an audio control signal including the audio coding mode, the sampling frequency of the six potential sampling frequencies, the number of audio channels, and the detected one of the first through third quantization bit numbers; and

an audio decoder to decode the audio data, to multi-channel mix, to sampling-frequency convert, to requantize the decoded audio signal according to the audio control signal, and to generate an output decoded audio data.

2. (ORIGINAL) The apparatus as claimed in claim 1, wherein the audio coding mode is linear pulse code modulated (PCM) audio, the first through third quantization bit numbers are respectively 16bits, 20bits and 24bits, and the first through sixth sampling frequencies are respectively 48KHz, 96KHz, 192KHz, 44.1KHz, 88.2KHz, and 176.4KHz.

3. (ORIGINAL) The apparatus as claimed in claim 1, wherein the audio coding mode is a compression coding system, the first through third quantization bit numbers of the audio data before compression are respectively 16bits, 20bits and 24bits, and the first through sixth sampling frequencies are respectively 48KHz, 96KHz, 192KHz, 44.1KHz, 88.2KHz, and 176.4KHz.

4. (ORIGINAL) The apparatus as claimed in claim 1, wherein said audio decoder further comprises audio decoding circuits to decode the audio data, to multi-channel mix, to sampling-frequency convert, and to requantize the decoded audio signal according to the audio control signal, wherein each audio decoding circuit corresponds to an audio coding mode.

5. (ORIGINAL) The apparatus as claimed in claim 1, wherein

said audio decoder further comprises a stream selector to select one of the audio streams which comprise the audio data according to the audio coding mode control signal to deliver the selected audio stream to the corresponding one of the audio decoding circuits, and

the audio decoding circuits comprise

a linear pulse code modulated (PCM) decoding circuit to decode the selected audio stream when the selected audio stream is a linear PCM audio stream, and to sampling frequency convert, to multichannel downmix, and to requantize the decoded linear PCM audio stream according to the audio control signal, and

a coding data decoding circuit to decode the selected audio stream when the selected audio stream is a compression coded audio stream by a corresponding extension algorithm, and to sampling frequency convert, to multichannel downmix, and to requantize the decoded compression coded audio stream according to the audio control signal.

6. (ORIGINAL) The apparatus as claimed in claim 1, wherein

said data receiver further corrects errors in the read data;

said audio decoder comprises:

a linear PCM decoder,

a Dolby AC-3 decoder,

a coding data decoder, and

an MPEG decoder; and

said controller drives the corresponding one of the linear PCM decoder, Dolby AC-3 decoder, coding data decoder, and MPEG decoder to decode the audio data based upon the audio coding mode of the corrected audio data.

7. (ORIGINAL) The apparatus as claimed in claim 1, further comprising a digital processor to filter the decoded audio data

8. (ORIGINAL) The apparatus as claimed in claim 1, wherein the first through sixth sampling frequencies comprise at least two sampling frequencies above 100Khz.

9. (ORIGINAL) The apparatus as claimed in claim 1, wherein two of the first through sixth sampling frequencies comprise 192KHz and 176.4KHz.

10. (ORIGINAL) The apparatus as claimed in claim 1, wherein the ATSI further comprises value fields, and the first through sixth sampling frequencies are indicated by corresponding states of two of the value fields, and

said controller further determines which of the first through sixth sampling frequencies is the sampling frequency from the corresponding states of the two value fields.

11. (ORIGINAL) The apparatus as claimed in claim 10, wherein one of the value fields indicates whether the sampling frequency is above 100 Khz.

12. (ORIGINAL) The apparatus as claimed in claim 10, wherein one of the value fields indicates whether the sampling frequency is one of 176.4 Khz and 192 Khz.

13. (ORIGINAL) The apparatus as claimed in claim 10, wherein,

the other of the two value fields has a state that indicates the sampling frequency is 176.4 Khz or 192 Khz, and

said controller further detects the one value field to determine whether the sampling frequency is one of 176.4 Khz and 192 Khz, and the state of the other value field to determine whether the sampling frequency is 176.4 Khz or 192 Khz.

14. (ORIGINAL) The apparatus as claimed in claim 13, wherein,

the first value field has a first or second state, the first state indicates the sampling frequency is one of 44.1KHz, 88.2KHz and 176.4KHz, and the second state indicates the sampling frequency is one of 48KHz, 96KHz, and 192KHz.

15. (ORIGINAL) The apparatus as claimed in claim 10, wherein

a first of the two value fields has a first or a second state, the first state indicates the sampling frequency is one of 44.1KHz, 88.2KHz and 176.4KHz, and the second state indicates the sampling frequency is one of 48KHz, 96KHz, and 192KHz,

a second of the two value fields has three states, and

said controller further detects

the first or second state of the first value field to determine whether the sampling frequency is ~~one of~~ one of 44.1KHz, 88.2KHz and 176.4KHz, or one of 48KHz, 96KHz, and 192KHz, and

one of the three states of the second value field to determine whether the sampling frequency is 176.4 Khz or 192 Khz.

16. (ORIGINAL) The apparatus as claimed in claim 1, further comprising:

an RF amplifier to convert the optical signal into an RF signal, and to extract modulated data including the information data; and

a demodulator to demodulate the modulated data to be provided to said audio decoder.

17. (ORIGINAL) The apparatus as claimed in claim 16, wherein

said demodulator comprises an digital signal processor, and

said audio decoder comprises an AV codec that decodes the encoded audio data from said demodulator to output the output decoded audio data.

18. (ORIGINAL) The apparatus as claimed in claim 17, wherein said audio decoder further comprises a host interface that decodes the encoded audio data with the AV codec.

19. (ORIGINAL) The apparatus as claimed in claim 16, wherein said RF amplifier further extracts a servo signal, and further comprising:

a servo unit to perform servo control using the extracted servo signal and information from said controller.

20. (ORIGINAL) The apparatus as claimed in claim 10, further comprising:

an RF amplifier to convert the optical signal into an RF signal, and to extract modulated data including the information data; and

a demodulator to demodulate the modulated data to be provided to said audio decoder.

21. (ORIGINAL) The apparatus as claimed in claim 20, wherein

said demodulator comprises an digital signal processor, and

said audio decoder comprises an AV codec that decodes the encoded audio data from said demodulator to output the output decoded audio data.

22. (ORIGINAL) The apparatus as claimed in claim 21, wherein said audio decoder further comprises a host interface that decodes the encoded audio data with the AV codec.

23. (ORIGINAL) The apparatus as claimed in claim 20, wherein said RF amplifier further extracts a servo signal, and further comprising:

a servo unit to perform servo control using the extracted servo signal and information from said controller.